

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

Prepared For:



**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
Central Administrative Support Center
Kansas City, Missouri 64106**

**NATIONAL WEATHER SERVICE
Amarillo Warning and Forecast Office
1610 South Coulter Street
Amarillo, Texas 79108**

Prepared By:



**Tetra Tech EM Inc.
6100 219th Street SW, Suite 550
Mountlake Terrace, WA 98043**

Contract Number: 50WCNA906018

NOAA Task Order: T0003

Tetra Tech Task Order: G1063-0061

April 14, 2003

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

**NATIONAL WEATHER SERVICE
Amarillo Warning and Forecast Office
1610 South Coulter Street
Amarillo, Texas 79108**

Original Date of Plan : April 14, 2003

Date of Last Plan Review : Not Applicable

**Date of Last Amendment
and P.E. Certification** : Not Applicable

Designated Person Responsible for Spill Prevention:

Oferal Wise, Environmental Focal Point
Telephone: (806) 335-1835

CERTIFICATION

I hereby certify that I or my designated agent have examined the facility, and being familiar with the provisions of Title 40 of the Code of Federal Regulations Part 112, I attest that this Spill Prevention, Control, and Countermeasures (SPCC) Plan has been prepared in accordance with good engineering practices including the consideration of applicable industry standards.

John McCall

Printed Name of Registered Engineer

Signature of Registered Engineer and Date

Registration No. **PE-050653-E**

State **PA**

REVIEW DOCUMENTATION AND MANAGEMENT APPROVAL PAGE

REVIEW DOCUMENTATION

In accordance with Title 40 Code of Federal Regulations (CFR) Part 112.5(b), a review and evaluation of this Spill Prevention, Control, and Countermeasures (SPCC) Plan shall be conducted at least once every 5 years. This evaluation shall be conducted by the Meteorologist in Charge, National Weather Service (NWS) Regional Environmental/Safety Coordinator, or National Oceanic and Atmospheric Administration (NOAA) Regional Environmental Compliance Officer.

If a change in the facility design, construction, operation, or maintenance has materially affected the potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines, an amendment shall be fully implemented as soon as possible, but no later than six months after such a change occurs, and shall be certified by a Professional Engineer. In this case, the National Weather Service shall amend the plan to include more effective prevention and control technology if:

- C Such technology will significantly reduce the likelihood of a spill event, and
- C If such technology has been field-proven at the time of review.

When a change at the facility has not affected the potential for discharge (such as a change in personnel or contact information), the amendment can be made any time, and certification by a Professional Engineer shall not be required.

Review Date	Printed Name of Responsible Manager	Signature of Responsible Manager	SPCC Plan Amended?	PE Certif. Required?

MANAGEMENT APPROVAL

The National Weather Service is committed to the prevention of discharges of oil to navigable waters and the environment. We maintain the highest standards for spill prevention, control, and countermeasures through regular review, updating, and implementation of this SPCC Plan for the Weather Forecast Office. I hereby certify that the necessary resources to implement this SPCC Plan have been committed.

Jose Garcia, Meteorologist in Charge

Printed Name and Title of Responsible Manager

Signature and Date

CONTENTS

<u>Section</u>	<u>Page</u>
Certification	i
Review Documentation and Management Approval	ii
PART I - GENERAL INFORMATION	1
A. GENERAL	1
1. Name	1
2. Type	1
3. Date of Initial Operation	1
4. Location	1
5. Name and Address of Operator	1
6. Facility Contacts	1
B. SITE DESCRIPTION AND OPERATIONS	1
1. Facility Location, Layout, and Operations	1
2. Facility Storage	2
3. Drainage Pathway and Distance to Navigable Waters	2
4. Spill History	2
5. Spill Potential, Volumes, and Rates	3
PART II - DESIGN COMPONENTS AND OPERATIONAL PROCEDURES FOR SPILL PREVENTION AND CONTROL	4
A. SPILL PREVENTION	4
1. Bulk Storage Tanks and Facility Transfer Operations	4
2. Tank Truck Unloading Operations	4
3. Inspections And Records	5
4. Site Security	6
5. Training	6
B. SPILL CONTROL	7
1. Secondary Containment Designs, Construction Material, and Volume	7
2. Spill Kits Type and Location	7
PART III - SPILL COUNTERMEASURES AND REPORTING	8
A. SPILL COUNTERMEASURES	8
B. SPILL REPORTING	9
1. General Notification Procedures for All Spills	9
2. Federal Notification	9
3. State Notification	10

4.	Cleanup Contractor Notification	11
PART IV - RECOMMENDED IMPROVEMENTS		12
A.	PHYSICAL UPGRADES	12
1.	850-Gallon AST Secondary Containment	12
2.	850-Gallon High-Level Alarm	12
3.	35-Gallon Day Tank	12
B.	PROCEDURAL CHANGES	13
1.	Inspections and Preventative Maintenance	13
2.	Tank Integrity Testing	13
3.	Training	13

Appendix

A	TANK RECORDS
B	TANK ULLAGE/FUELING LOG AND FUEL UNLOADING PROCEDURE CHECKLIST
C	INSPECTION CHECKLISTS
D	TRAINING OUTLINE AND TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, PARTS 112.1-112.20-OIL POLLUTION PREVENTION
E	SPILL REPORTING FORM
F	CROSS REFERENCE OF THE REQUIREMENTS OF TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, PARTS 112.7 AND 112.8, WITH THIS PLAN

FIGURES

<u>Figure</u>		<u>Page</u>
1	SITE LOCATION	14
2	SITE LAYOUT	15

TABLES

<u>Table</u>		<u>Page</u>
1	DESCRIPTIVE INVENTORY OF FACILITY STORAGE	16
2	POTENTIAL SPILL SOURCES AND VOLUMES	17

PART I - GENERAL INFORMATION

A. GENERAL

This section provides general information about the facility.

1. Name

National Weather Service (NWS)
Amarillo Warning and Forecast Office (WFO)

2. Type

This facility is an onshore facility (non-production) that operates as a weather forecast center and is staffed 24 hours per day, 7 days per week, and 365 days per year.

3. Date of Initial Operation

1990

4. Location

1610 South Coulter Street
Amarillo, Potter County, Texas 79108

5. Name and Address of Operator

National Weather Service
1610 South Coulter Street
Amarillo, Texas

6. Facility Contacts

<u>Name</u>	<u>Title</u>	<u>Telephone Number</u>
Oferal Wise	Environmental Focal Point	(806) 335-1835
Jose Garcia	Meteorologist in Charge	(806) 335-1835

B. SITE DESCRIPTION AND OPERATIONS

This section describes the site location, its operations that store diesel fuel, site drainage patterns, spill history, and spill potential.

1. Facility Location, Layout, and Operations

The facility is located in Amarillo, Texas (Figure 1). Figure 2 shows the layout of the facility, including the location of a 850-gallon aboveground storage tank (AST), a 35-gallon day tank, and two 250-gallon Radar Data Acquisition (RDA) tanks.

The 850-gallon AST and 35-gallon day tank store fuel that is used to power a 175-kilowatt (kW) emergency WFO generator. The WFO generator is used to supply backup electricity for WFO building operations. The day tank and 175-kW generator are inside the generator building located immediately west of the WFO and are not exposed to precipitation. The 850-gallon AST is located north of the generator room.

The two 250-gallon RDA tanks store fuel that is used to power the facility's RDA emergency generator. The RDA emergency generator supplies backup electricity to the RDA tower and equipment located approximately 70 feet east of the WFO building. The RDA tanks and RDA generator are located in the RDA generator building and are not exposed to precipitation.

The estimated fuel usage is approximately 9 gallons per month. This estimate is based on an automatic test of the generators once per week for 1 hour. Fuel consumption would increase depending on the frequency and duration of any power outages.

2. Facility Storage

The 850-gallon AST is a welded steel, cylindrical tank that is horizontally situated. The 850-gallon AST has a primary and primary emergency vent. The 850-gallon AST is connected to a pump on top of the 35-gallon steel day tank via a 1-inch diameter steel pipe. The pump moves fuel from the 850-gallon AST into the day tank. The 1-inch diameter steel pipe is encased by a 4-inch diameter poly-vinyl chloride (PVC) pipe from the top of the 850-gallon AST to the exterior wall of the generator storage building. The day tank is connected to the generator by flexible rubber supply and return lines. An overflow basin is present to contain spills from the day tank.

The two 250-gallon RDA tanks are rectangular, single-walled welded steel plates. Fuel for the RDA generator is fed directly from the RDA tanks via rubber supply lines.

Table 1 summarizes the pertinent information on the tanks at the facility. A copy of all tank registrations and other tank records is included in Appendix A.

3. Drainage Pathway and Distance to Navigable Waters

The area around the WFO and RDA tower is relatively flat. Fuel spilled from the 850-gallon AST would west across an asphalt driveway to a grassy swale. The swale directs flow south through a small culvert to a grassy area south of the WFO parking lot. Fuel spilled from the RDA containment areas would flow east across the gravel surrounding the RDA generator building, then continue across a grassy area towards a drainage swale along Old English Road. The nearest water body receiving drainage from these areas is located approximately 0.2 mile from the site.

4. Spill History

Reportable spill events from 1990 to present (date on cover of this plan):

None.

5. Spill Potential, Volumes, and Rates

The potential causes of spills are from tank overfilling, a ruptured hose during fuel unloading, failure of a fuel supply line to the generator or day tank, vehicle collision, structural failure, vandalism, or a natural disaster. For the day tank, additional causes could include failure of the day tank pump to shut down or failure of the line from the pump to the day tank.

Spills can be prevented through the prevention and countermeasures in place or recommended in this plan. Operational procedures are in place to prevent overfilling during fuel unloading, and countermeasures can be used to prevent spills that may occur during unloading from reaching the nearest water body. Failure of supply lines, pumps or hoses can be minimized through routine inspections. Spills caused by vehicle collision or vandalism can easily be prevented because none of the tanks are in the direct line of traffic. Also, the WFO generator building would likely contain a spill from the day tank and the two RDA tanks are located within a locked building that is designed to contain spills. Vandalism is generally deterred because the facility is manned 24 hours per day; the RDA area is fenced for additional deterrence. Spills caused by a natural disaster are low probability events and impractical to defend against beyond the spill prevention, control, and countermeasures currently in place. Part IV of this plan recommends physical upgrades and procedural changes for additional pollution prevention, control, and countermeasures.

Table 2 summarizes the potential type of failure, potential spill volume, estimated rate, and direction of spill flow from the tanks.

PART II - DESIGN COMPONENTS AND OPERATIONAL PROCEDURES FOR SPILL PREVENTION AND CONTROL

This section discusses spill prevention and control measures that shall be implemented at the facility.

A. SPILL PREVENTION

This section describes design components and operating procedures that shall be implemented at the facility to prevent oil spills.

1. Bulk Storage Tanks and Facility Transfer Operations

850-gallon AST: The steel tank construction is compatible with the diesel fuel stored in the tank. A float-type level gauge indicates the fuel level (from empty to full) in the AST. A 3-gallon-capacity conical spill container surrounds the fill spout. The AST is equipped with an audible high-level alarm and an audible leak detection alarm. The AST is located inside a concrete basin that has an approximate capacity of 770 gallons, which provides partial secondary containment.

Day Tank: The day tank is located within the WFO generator room. The steel tank construction is compatible with the diesel fuel stored in the tank. The day tank is equipped with a liquid level gauge to indicate the amount of fuel in the tank (from empty to full). Also, the day tank is equipped with an overflow basin.

Piping: The aboveground piping from the AST to the day tank pump is in a 4-inch PVC pipe sleeve to protect it from corrosion.

RDA Tanks: These tanks are located inside the RDA generator building that is designed to provide sufficient containment for potential spills from the tanks. The steel tank construction is compatible with the diesel fuel stored in the tanks. The RDA tanks are compatible with the diesel fuel stored within the tanks.

2. Tank Truck Unloading Operations

All delivery drivers shall have U.S. Department of Transportation hazardous material transportation training as required by Federal law.

The remainder of this section discusses the procedures that shall be used during unloading of fuel from the tank truck into the tanks to prevent spills. This procedure shall be documented every time refueling occurs on the form found in Appendix B. Copies of this form shall be kept for 5 years.

The following procedure shall be used prior to fuel unloading:

- C Move spill containment equipment, such as booms or spill barriers, into the unloading area.
- C If applicable, ensure that the audible high-level alarm system and the automatic shutoff valve are functioning properly.
- C Determine the available capacity (ullage) of the tank by converting the reading on the fuel gauge to gallons (see Appendix B). This ullage is communicated to the fuel supply contractor and marked in the fueling log.
- C Block the tank truck wheels.
- C Place drip pans under all pump hose fittings (if applicable) prior to unloading.
- C Ensure the fill nozzle is placed in the appropriate tank appurtenance.

Both the NWS representative and the delivery driver shall remain with the vehicle at all times during unloading. Gauges on the tank and the truck shall be continuously monitored to ensure the ullage is not exceeded. If an audible high-level alarm sounds, the unloading of fuel shall be stopped as soon as possible.

After fuel unloading is completed:

- C Record the amount of fuel transferred to the tank in the log (Appendix B).
- C Drain the fill hose and then ensure that all drain valves are closed (if applicable) prior to removal of the hose from the tank.
- C Pour any fuel in the drip pans, tank truck containment pool, or spill container on the fill pipe into the storage tank (if it has the capacity), or dispose of appropriately.
- C Inspect the tank truck prior to removing the blocks to ensure the lines have been disconnected from the tank.
- C Remove the blocks from the truck wheels. Prior to departure, closely inspect the lowermost drain and all outlets of the delivery truck and ensure they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.
- C Place a copy of the fuel unloading checklist in the SPCC plan.

3. Inspections And Records

Inspection and Maintenance of Tanks: The 850-gallon AST, day tank, and RDA tanks shall be inspected weekly for any oil outside the tanks, especially at seams (and including the tank underside). The concrete basin located beneath the 850-gallon AST shall be inspected for cracks. The outside of exposed piping shall be inspected weekly, especially at the joints such as gasket fittings. Monthly and annual inspections shall follow the checklists shown in Appendix C.

Integrity Testing of Tanks: Visual integrity testing shall be used to monitor the structural integrity of all tanks. This protocol provides environmental protection equivalent to that which would be provided by other types of non-destructive integrity testing because of the following.

- C The 850-gallon AST is a shop-built, single-walled steel tank equipped with a concrete containment basin for secondary containment and has a monitoring device continuously monitors the secondary containment for any leaks from the steel tank. Also, routine (weekly, monthly, and annual) visual inspections would detect any tank integrity issues because all sides of the tank are visible.
- C The day tank is a shop-built, single-walled steel tank equipped with an overflow basin for secondary containment and a monitoring device that would detect any leaks entering the basin. Also, routine (weekly, monthly, and annual) visual inspections would detect any tank integrity issues because all sides of the tank are visible.
- C The RDA tanks are shop-built, single walled tanks stored in a building constructed with "tub flooring" that provides secondary containment. Routine (weekly, monthly, and annual) visual inspections would detect any leaks or other problems with tank integrity because the tank is visible on all sides.
- C Facility personnel are regularly trained in pollution prevention practices and tank inspection requirements as set forth in this plan (Part III, Section 5 and Part IV, Recommended Improvements).

Should any visual inspection indicate a problem with tank integrity (e.g., corrosion, cracking, leaking), the facility shall preferably replace the tank rather than conducting material repairs. If the facility instead chooses to conduct repairs, non-destructive integrity testing shall be conducted to verify that the repairs were completed properly.

Record Keeping: The Environmental Focal Point or a designated alternate is responsible for completing the ullage logs and documenting the fuel unloading procedures. These records, as well as records of all inspections and tank testing, shall be maintained for at least 5 years.

4. Site Security

Adequate lighting is provided for all tanks such that spills can be detected and vandalism deterred and there is electronic surveillance on the premises. Both the WFO and RDA generator buildings are kept locked. Signage around all of the tanks warns of the presence of a combustible liquid, that the combustible liquid is diesel fuel, and that smoking is not permitted near the tanks. A fire extinguisher is located in the adjacent generator enclosures. None of the tanks are located in the direct line of parking lot traffic. A security fence surrounds the RDA area.

5. Training

The Environmental Focal Point (person responsible for spill prevention at the facility), at least one alternate, and the Meteorologist in Charge shall be trained in the intent of the applicable oil spill regulations and how to implement the inspection and maintenance procedures outlined in the previous section. Spill control and countermeasures also shall be included in the training. The

alternate shall be designated in case the primary person is off the site at the time of a spill. A recommended outline for the training is found in Appendix D.

Training shall be repeated at least once per year. All new personnel responsible for implementing the SPCC plan shall be properly trained before beginning the new position. A record of who was trained, when, and by whom, shall be filed with this SPCC plan and kept for a period of 5 years. This requirement is found in Title 40 CFR 112.7(f).

Spill prevention briefings for operating personnel shall be conducted at least once per year to ensure adequate understanding of the SPCC plan and to describe known spill events or failures, malfunctioning components, and recently developed precautionary measures. These briefings can be conducted concurrent with training sessions described above.

B. SPILL CONTROL

This section describes control measures that shall be implemented to prevent any spilled oil from entering navigable waters or adjoining shorelines.

1. Secondary Containment Designs, Construction Material, and Volume

The 850-gallon WFO AST is a single-walled tank with a concrete secondary containment basin. The concrete basin beneath the AST currently is capable of containing approximately 770 gallons; Part IV of this plan recommends an increase in this capacity. The concrete basin is equipped with a monitoring device that continuously monitors the secondary containment for any leaks from the steel tank. The basin also has a valve that can be opened to drain the basin. The valve normally is closed; if it is necessary to drain precipitation accumulated in the concrete basin, the operator shall first verify that no oil, oily sheen, or other visible discoloration is present.

The 35-gallon day tank is located inside the WFO building generator room that does not allow precipitation into the area and likely would provide adequate containment in the event of a spill. Also, the day tank is equipped with an overflow basin.

Secondary containment for the two 250-gallon RDA tanks is provided for in the RDA generator building design. Adequate containment volume is provided in the building in the case of an instantaneous release. The RDA generator building is designed with a "tub flooring" with a raised door frame to prevent spills from flowing from the building.

2. Spill Kits Type and Location

The facility shall have spill kits designed to absorb diesel fuel and which can prevent discharged oil from reaching nearby water bodies. The facility currently maintains two spill kits that include oil absorbent socks, pads, and booms contained in a 85-gallon polyethylene containers that can be used as a disposal container. One kit is located outside the WFO generator building and another outside the RDA generator building. An additional spill kit contained in a 20-gallon plastic bucket is located inside the RDA generator building.

PART III - SPILL COUNTERMEASURES AND REPORTING

The primary emphasis of this SPCC plan is on prevention. The spill countermeasures presented do not constitute a contingency plan detailed in Title 40 CFR Part 109, nor is one required. Such a plan is only required under Title 40 CFR 112.7(d) if it is impracticable to provide containment, diversionary structures, or equipment to prevent the discharge of oil to navigable waters. In addition, this facility is not required to have a facility response plan under Title 40 CFR Part 112.20 because it does not:

- C Transfer oil over water from vessels and have a total oil storage capacity of greater than or equal to 42,000 gallons, or
- C Have a total storage capacity over 1 million gallons.

A. SPILL COUNTERMEASURES

This section presents countermeasures to contain, clean up, and mitigate the effects of an oil spill that impacts navigable waters or adjacent shorelines.

A spill containment and cleanup activity will never take precedence over the safety of personnel. No countermeasure activities will be undertaken until conditions are safe for workers. The “SWIMS” procedures should be implemented as countermeasures:

- S** - Stop the leak and eliminate ignition sources.
 - a. Attempt to seal or some how stop leak if it can be done safely.
 - b. Attempt to divert flow away from catch basins with a spill barrier or the contents of the spill kit.
 - c. Eliminate all ignition sources in the immediate area.
- W** - Warn others.
 - a. Yell out “SPILL.” Inform the person in-charge at your facility.
 - b. Account for all personnel and ensure their safety.
 - c. Notify contacts and emergency response contractor as described in the following section for assistance in control and cleanup.
- I** - Isolate the area.
 - a. Rope off the area.
- M** - Minimize your exposure. Stay upwind.
- S** - Stand by to assist the emergency response contractor, if necessary.

B. SPILL REPORTING

This section discusses the reporting procedures for spills of diesel fuel at the facility. The individuals and organizations that are notified vary based on the quantity of the spill, whether it reaches navigable waters or adjoining shorelines, and the frequency of spills.

A spill report form that requests the information to be reported to all agencies in written form (to the extent known) is included in Appendix E. Copies of the completed form should be submitted, preferably by e-mail, to the NWS and NOAA representatives listed below.

1. General Notification Procedures for All Spills

The responsible person or designee is directly charged with reporting all oil spills that result from facility operations as follows:

- First, call 9-1-1 if there is an immediate emergency (if “9” is required for connection to an outside line, then call 9-9-1-1)
- Next, notify the appropriate individuals within the NWS such that the individuals can keep internal records regarding the spill event. If necessary, the individuals can provide technical assistance regarding the procurement of cleanup contractors, the potential need for follow-up assessments, regulatory reporting, waste disposal, or other issues.

1. **Mike Jacob, (301) 713-1838 Ext. 165, Michael.Jacob@noaa.gov,**
NWS Environmental Compliance Officer
2. **Olga Kebis, (301) 713-1838 Ext. 173, Olga.Kebis@noaa.gov,**
NWS Safety Officer
3. **Terry Brisbin, (817) 978-7777, Ext. 139, Terry.Brisbin@noaa.gov,**
NWS Southern Regional Environmental/Safety Coordinator
4. **Mark George, (303) 497-3064, Mark.George@noaa.gov,**
NOAA Mountain Regional Environmental Compliance Officer

2. Federal Notification

The Federal Clean Water Act as described in Title 40 CFR Part 110.6, requires notifying the U.S. Environmental Protection Agency’s (EPA) National Response Center (or the U.S. Coast Guard [USCG]) as soon as anyone has knowledge of any discharges of oil in quantities that “may be harmful.” Title 40 CFR Part 110.3 defines “may be harmful” as a discharge that:

- Violates applicable water quality standards, or
- Causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

If either of these criterion are met contact:

- The National Response Center (EPA and USCG): **(800) 424-8802**

Under the SPCC regulations, spill information listed in Title 40 CFR Part 112.4(a) must be reported to the EPA Regional Administrator within 60 days if either of the following occurs:

- A discharge of more than 1,000 gallons of oil into or upon navigable waters or adjoining shorelines in a single event, or
- A discharge of more than 42 gallons of oil during each of two spill events within any 12-month period.

If one of the above has occurred, the information to be reported to the EPA Regional Administrator shall include the following items by submitting a copy of this SPCC Plan and a completed copy of the spill report form in Appendix E.

- Facility name
- Name of the person reporting the incident
- Facility location
- Maximum storage or handling capacity of the facility
- Corrective action and countermeasures taken including a description of equipment repairs and replacements
- Adequate description of the facility including maps, flow diagrams, and topographical maps, as necessary
- Cause of the discharge
- Additional preventive measures taken or contemplated to minimize recurrence
- Other information that the Regional Administrator may deem pertinent

Diesel fuel is not listed as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); therefore, no other notification to the EPA is required for discharges of diesel fuel other than those listed above.

3. State Notification

To satisfy the state reporting requirements, the location and quantity of any spill must be determined. Under the Texas Administrative Code Title 30, Part 1, Chapter 327, a reportable quantity (RQ) is defined as follows:

- If spilled on the surface of the land, any quantity of oil over 25 gallons, or
- If spilled into the waters of the state, any quantity that would be sufficient to create a sheen.

If one or both of these criteria are met, contact:

- State Emergency Response Center: **(800) 832-8224**

4. Cleanup Contractor Notification

An emergency response contractor should be notified to assist with the clean up, if necessary. Contact information for at least three contractors shall be maintained in this plan. NWS has identified the following contractors that are available for an emergency response:

- Andersen & Associates Compliance Consultants, Inc.: **(806) 353-2298**
- Amarillo Hazmat Inc.: **(806) 372-2580**
- Llano Permian Environmental: **(806) 467-0607**

PART IV - RECOMMENDED IMPROVEMENTS

In accordance with Title 40 CFR Sections 112.7 and 112.8, this section presents physical upgrades or procedural changes that are not yet fully operational but are called for in the plan.

A. PHYSICAL UPGRADES

1. 850-Gallon AST Secondary Containment

The concrete secondary containment beneath the 850-gallon AST does not provide sufficient secondary containment. A containment capacity of 110 percent of the volume of the AST is required to account for spills of the entire tank volume capacity of the AST plus precipitation. Therefore, the required containment capacity is 935 gallons. The current volume of the secondary containment is calculated as follows:

$$\begin{aligned}\text{Volume in Cubic Feet (ft}^3\text{)} &= \text{Length} \times \text{Width} \times \text{Height} \\ &= 9 \text{ feet} \times 7 \text{ feet} \times 1.5 \text{ feet} \\ &= 94.5 \text{ ft}^3 \\ \text{Volume in Gallons} &= 94.5 \text{ ft}^3 \times 7.48 \text{ gallons/ft}^3 = 707 \text{ gallons}\end{aligned}$$

The containment capacity should be increased by raising the basin's concrete berm to a total height of 2 feet (the current height is 1.5 feet as shown above). If the height of the concrete basin were 2 feet, the volume of secondary containment would be calculated as follows:

$$\begin{aligned}\text{Volume in ft}^3 &= \text{Length} \times \text{Width} \times \text{Height} \\ &= 9 \text{ feet} \times 7 \text{ feet} \times 2 \text{ feet} \\ &= 126 \text{ ft}^3 \\ \text{Volume in Gallons} &= 126 \text{ ft}^3 \times 7.48 \text{ gallons/ft}^3 = 943 \text{ gallons}\end{aligned}$$

This upgrade should be implemented within 6 months of the date of this plan.

2. 850-Gallon AST High-Level Alarm

The visual indicator bulb for the high-level alarm needs is not functional and should be repaired. This upgrade should be implemented within 6 months of the date of this plan.

3. 35-Gallon Day Tank

The 35-gallon day tank and overflow basin should be equipped with a float switch that will detect fuel that has spilled or leaked. The float switch should be connected to the audible alarm system and should trigger a mechanism to shut off the pump the generator in the event that fuel is detected. This upgrade should be implemented within 6 months of the date of this plan.

B. PROCEDURAL CHANGES

1. Inspections and Preventative Maintenance

The inspection checklists found in Appendix C should be followed. This requirement is found in Title 40 CFR Part 112.7(e). The area within and around all tanks shall be inspected for signs of leaks regularly. Visual inspections of the outside of the storage tanks and the walls of the tanks should serve to signal a potential problem with their integrity. Should any visual inspection indicate a tank is leaking or has otherwise failed, and the facility instead chooses to conduct repairs, non-destructive integrity testing shall be conducted to verify that the repairs were completed properly.

2. Tank Integrity Testing

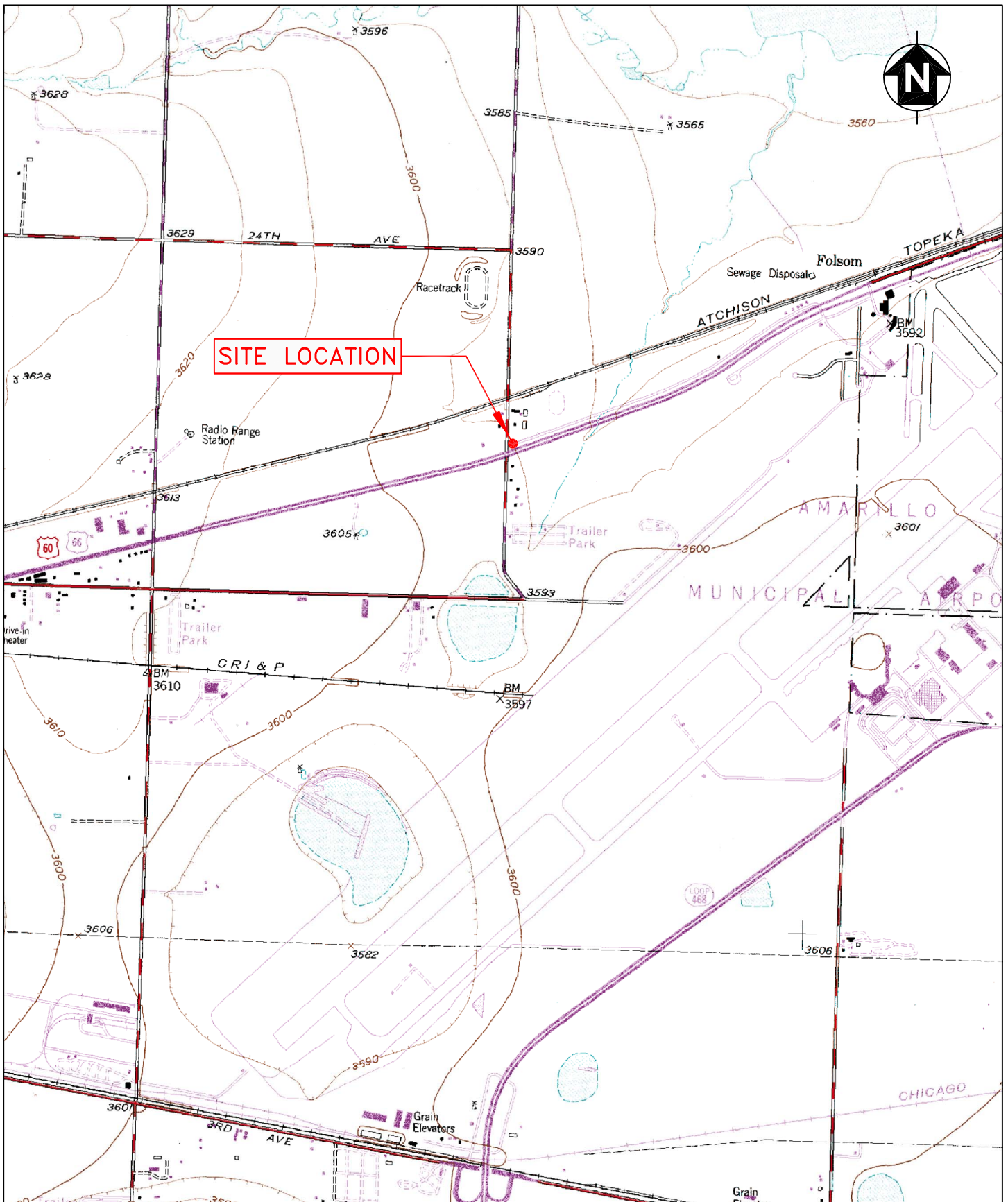
As discussed in Part II.A.3 of this plan, visual integrity testing shall be used to monitor the structural integrity of all tanks. The inspection checklists found in Appendix C should be followed. This requirement is found in Title 40 CFR Part 112.8(c)(6). Should any visual inspection indicate a tank is leaking or has otherwise failed, the facility shall preferably replace the tank rather than conducting material repairs. If the facility instead chooses to conduct repairs, non-destructive integrity testing shall be conducted to verify that the repairs were completed properly.

3. Training

The Environmental Focal Point (person responsible for spill prevention at the facility), at least one alternate, and the Meteorologist in Charge should be trained in the intent of the applicable oil spill regulations and how to implement the inspection and maintenance procedures outlined in the previous section. Spill control and countermeasures also should be included in the training. The alternate should be designated in case the primary person is off the site at the time of a spill. A recommended outline for the training is found in Appendix D.


Training should be repeated at least once per year. All new personnel responsible for implementing the SPCC plan should be properly trained before beginning the new position. A record of who was trained, when, and by whom, should be filed with this SPCC plan and kept for a period of 5 years. This requirement is found in Title 40 CFR 112.7(f).

Spill prevention briefings for operating personnel should be conducted at least once per year to ensure adequate understanding of the SPCC plan and to describe known spill events or failures, malfunctioning components, and recently developed precautionary measures. These briefings can be conducted concurrent with training sessions described above.



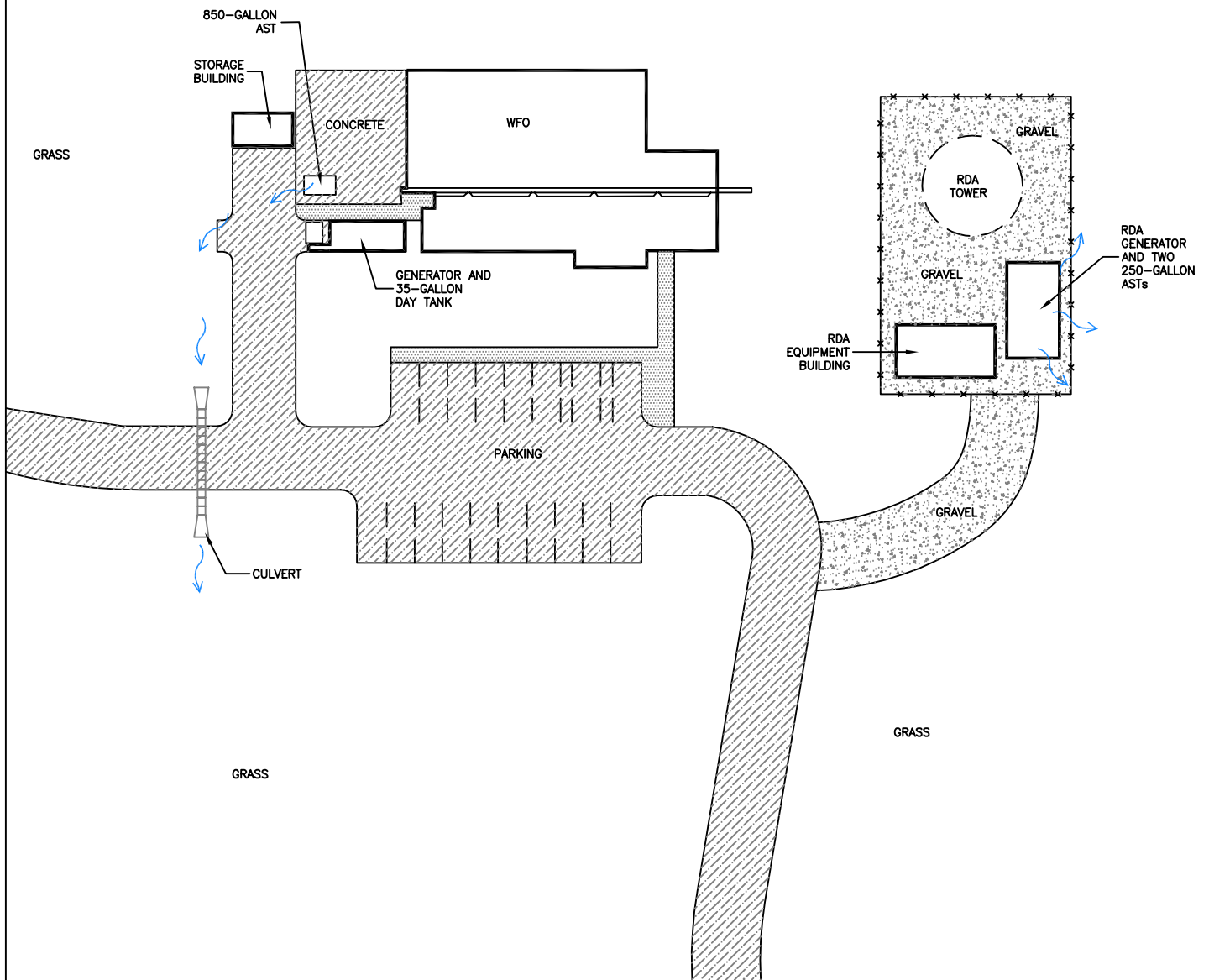
Legend

0 .25 .5
 APPROXIMATE SCALE IN MILES






FIGURE 1
 SITE LOCATION
 NATIONAL WEATHER SERVICE
 AMARILLO WARNING AND FORECAST OFFICE
 AMARILLO, TEXAS
 TETRA TECH EM INC.



GRASS



LEGEND

-  Spill Path
-  Fence
-  Asphalt Areas
-  Concrete Areas
-  Gravel Areas

Notes:

AST Aboveground Storage Tank
RDA Radar Data Acquisition
WFO Weather Forecast Office

0 25' 50'
APPROXIMATE SCALE IN FEET

FIGURE 2
SITE LAYOUT
NATIONAL WEATHER SERVICE
AMARILLO WARNING AND FORECAST OFFICE
AMARILLO, TEXAS

TABLE 1

DESCRIPTIVE INVENTORY OF FACILITY STORAGE

Tank	Nominal Capacity (Gallons)	Product Stored	Type	Double Walled?
850-gallon AST	850	Diesel fuel	AST	No ¹
Day Tank	35	Diesel fuel	AST	No
RDA Tank	250	Diesel fuel	AST	No²
RDA Tank	250	Diesel fuel	AST	No²
Total Capacity	1,385			

Notes:

AST Aboveground storage tank

1 A concrete containment basin is present beneath the 850-gallon AST.

2 Tanks are in RDA generator building designed to contain at least 110 percent of the tank volume.

TABLE 2**POTENTIAL SPILL SOURCES AND VOLUMES**

Source	Event	Potential Spill Volume (gallons)	Estimated Rate (gallons per minute)	Direction of Spill Flow	Remarks
850-gallon AST	Overfilling or a ruptured hose during fueling	>0 to 40 ^a	80 ^b	West, then south toward culvert	Operational procedures are in place to prevent overfilling and spill kit materials can be used to prevent spills from reaching a nearby water body.
	Failure of fuel supply line to pump	>0 to 850	Variable	West, then south toward culvert	Can be minimized through routine inspections.
	Structural failure or vandalism	>0 to 850	Variable	West, then south toward culvert	Low probability that both the AST and containment would fail. Facility is manned 24 hours per day.
	Vehicle collision	>0 to 850	Variable	West, then south toward culvert	Tank is not located in the direct line of traffic.
	Overturn or puncture during a natural disaster	>0 to 850	Variable	West, then south toward culvert	Low probability event. Concrete secondary containment gives extra protection, but a natural disaster could cause a spill.
35-Gallon Day Tank	Failure of the pump to shut down after filling day tank or failure of the line from pump to day tank.	>0 to 850	Variable	West, then south toward culvert	Can be minimized through routine inspections. Tank is located within building likely to contain a spill.
	Failure of fuel return line	>0	10 ^c	West, then south toward culvert	Can be minimized through routine inspections.
	Structural failure or vandalism	>0 to 35	Variable	West, then south toward culvert	Low probability event can be minimized through regular inspections and maintenance. Tank is in a locked building and facility is manned 24 hrs/day.
	Overturn or puncture during a natural disaster	>0 to 35	Variable	West, then south toward culvert	Low probability event.

Notes:

- a Based on a maximum pumping rate of 80 gallons per minute from the fill truck and a maximum of 30 seconds to turn off the pump.
- b Approximate maximum pumping rate of fill truck.
- c Estimated return line flow rate.

TABLE 2

POTENTIAL SPILL SOURCES AND VOLUMES (continued)

Source	Event	Potential Spill Volume (gallons)	Estimated Rate (gallons per minute)	Direction of Spill Flow	Remarks
Two 250-Gallon RDA Tanks	Overfilling or a ruptured hose during fueling	>0 to 40 ^a	80 ^b	East	Operational procedures are in place to prevent overfilling and spill kit materials can be used to prevent spills from reaching a nearby water body.
	Failure of fuel supply line to pump	>0 to 500	Variable	East	Can be minimized through routine inspections. Tanks and supply lines are within a locked building designed to contain spills.
	Structural failure or vandalism	>0 to 500	Variable	East	Tanks and supply lines are within a locked building designed to contain spills. Low probability event that both primary and secondary tank shells would fail.
	Overturn or puncture during a natural disaster	>0 to 500	Variable	East	Low probability event.

Notes:

- a Based on a maximum pumping rate of 80 gallons per minute from the fill truck and a maximum of 30 seconds to turn off the pump.
- b Approximate maximum pumping rate of fill truck.
- c Estimated return line flow rate.

APPENDIX A
TANK RECORDS

APPENDIX B

**TANK ULLAGE/FUELING LOG AND
FUEL UNLOADING PROCEDURE CHECKLIST
(2 Pages)**

APPENDIX B-1

TANK ULLAGE AND FUELING LOG

Tank Capacity _____ gallons

Date	Initials	Gauge Reading	Initial Volume of Fuel in Tank^a (Gallons)	Available Capacity or Ullage^b (Gallons)	Quantity Added (Gallons)	Comments

Notes:

a From gauge reading

b Available capacity = tank capacity - initial volume of fuel in tank

APPENDIX B-2

FUEL UNLOADING PROCEDURE CHECKLIST

Date: _____

Tank: _____

NWS Representative: _____

Supplier: _____

/	ITEM	DESCRIPTION	COMMENT
The following six items must be completed <u>prior</u> to fuel unloading:			
	1	Move spill containment equipment, such as booms or spill barriers, into the unloading area.	
	2	If applicable, ensure the audible high-level alarm system and automatic shutoff valve are functioning properly.	
	3	Determine the available capacity (ullage) of the tank by converting the reading on the fuel gauge to gallons (see Appendix B, page B-1 in SPCC plan). This ullage should then be marked in the fueling log and communicated to the tank truck unloading contractor.	
	4	Block the wheels of the tank truck.	
	5	Place drip pans under all pump hose fittings (if applicable) after the hose is hooked up to the tank and prior to unloading.	
	6	Ensure the fill nozzle is placed in the appropriate tank appurtenance.	
During unloading			
	7	Ensure that the NWS representative and the tank truck operator remain with the vehicle at all times during unloading.	
	8	Monitor the gauges on the tank and the truck continuously to ensure the ullage is not exceeded. If the audible high-level alarm sounds, the unloading of fuel is stopped as soon as possible.	
After fuel unloading is completed			
	9	Record the amount of fuel unloaded in the log (Appendix B, page B-1).	
	10	Prior to removing the fill hose from the tank, ensure that it is drained and that all drain valves are closed (if applicable).	
	11	Any fuel accumulated in the drip pans or spill container on the fill pipe should be poured into the tank (if it has the capacity) or disposed of appropriately (describe how it was disposed of, if applicable).	
	12	Inspect the tank truck prior to removing the blocks to ensure the lines have been disconnected from the tank.	
	13	Prior to departure, closely inspect the lowermost drain and all outlets of the delivery truck and ensure they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.	
	14	Place a copy of this fuel-unloading checklist in the SPCC plan.	

APPENDIX C

INSPECTION CHECKLISTS
(2 Pages)

MONTHLY INSPECTION CHECKLIST			
Date of Inspection:	Tank Name or No.:		
Date of Last Inspection:	Inspected by:	Signature:	
A. TANKS	YES	NO	NOTES
1. Are tanks marked properly?			
2. Is area atop and around tank and within the secondary containment free of combustible materials, debris, and stains?			
3. Is there any oil on the ground, concrete, or asphalt around the tank?			
4. Are there any visible cracks or indications of corrosion on the tank, at fittings, joints, or seals (such as paint peeling or rust spots)?			
5. Are there any raised spots, dents, or cracks on the tank?			
6. Does it appear that the foundation has shifted or settled?			
7. Is the fuel gauge working properly?			
8. Are all vents clear so they may properly operate?			
9. If rainwater is present within containment, does capacity remain for spill control (if applicable)?			
B. PIPING			
1. Is there any oil on the outside of or under any aboveground piping, hoses, fittings, or valves?			
2. Are aboveground piping, hoses, fittings, or valves in good working condition?			
C. SECURITY/SAFETY/SPILL COUNTERMEASURES			
1. Are lights working properly to detect a spill at night?			
2. Are all locks in the "lock" position?			
3. Are all warning signs properly posted and readable?			
4. Are vehicle guard posts in place and properly secured (if applicable)?			
5. Are spill kits easily accessible, protected from the weather, complete, and replenished if necessary?			
Corrective Actions Required:			

ANNUAL INSPECTION CHECKLIST			
Date of Inspection:	Tank Name or No.:		
Date of Last Inspection:	Inspected by:	Signature:	
A. MONTHLY CHECKLIST	YES	NO	NOTES
1. Have monthly inspection checklists been completed?			
B. TANKS			
1. Are all alarms and automatic shutoff devices working properly?			
2. Is interstitial monitor functioning properly (if applicable)?			
C. OTHER			
1.			
Corrective Actions Required:			

APPENDIX D

TRAINING OUTLINE AND

TITLE 40 OF THE CODE OF FEDERAL REGULATIONS

PARTS 112.1 THROUGH 112.20 - OIL POLLUTION PREVENTION

(1 Pages)

APPENDIX D

OUTLINE FOR SPILL PREVENTION, CONTROL, AND COUNTERMEASURES TRAINING

Training will be provided for facility personnel at the following times:

- C System startup or whenever new equipment is installed
- C Within the first week of employment for new personnel
- C Annually

The training will include complete instruction in the elements of the facility's Spill Prevention, Control, and Countermeasures plan and will include the following:

- A. Pollution Control Laws, Rules, and Regulations Including a Summary of Title 40 of the Code of Federal Regulations Part 112, "Oil Pollution Prevention" (see Attachment)
- B. Fuel Storage
 - 1. Purpose and application of the following system elements:
 - a. Tanks
 - b. Piping
 - c. Pumps
 - d. Accessory equipment
 - e. Electronic monitors
 - 2. Operation, maintenance, and inspection of system elements
- C. Spill Prevention
 - 1. Potential spill sources
 - 2. Spill flow direction and impact on navigable waters
 - 3. Procedures to prevent spills, especially during fuel unloading
- D. Spill Control
 - 1. Secondary containment
 - 2. Safety valves
 - 3. Pump and equipment shutoff switches
 - 4. Use of catch basin inlet covers or other diversionary devices
- E. Spill Countermeasures
 - 1. Location and use of emergency phone numbers
 - 2. Location and use of fire extinguishers
 - 3. Location and use of spill cleanup kit
 - 4. Stopping the leak

ATTACHMENT

**TITLE 40 OF THE CODE OF FEDERAL REGULATIONS
PART 112 - OIL POLLUTION PREVENTION
Amendment, Federal Register July 17, 2002**

(21 Pages)

THIS DATA CURRENT AS OF THE FEDERAL REGISTER DATED JULY 17, 2002
THIS RULE IS EFFECTIVE AUGUST 16, 2002

On July 17, 2002, the Environmental Protection Agency published in the Federal Register the Final Rule for Oil Pollution Prevention and Response for non-transportation-related onshore and offshore facilities. The Final Rule amended Title 40 of the Code of Federal Regulations Part 112 as follows:

PART 112--OIL POLLUTION PREVENTION

1. The authority for part 112 continues to read as follows:

Authority: 33 U.S.C. 1251 et seq.; 33 U.S.C 2720; E.O. 12777 (October 18, 1991), 3 CFR, 1991 Comp., p. 351.

2. Part 112 is amended by designating Secs. 112.1 through 112.7 as subpart A, adding a subpart heading and revising newly designated subpart A to read as follows:
Subpart A--Applicability, Definitions, and General Requirements For All Facilities and All Types of Oils
Sec.

112.1 General applicability.

112.2 Definitions.

112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.

112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.

112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.

112.6 [Reserved].

112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

Subpart A--Applicability, Definitions, and General Requirements for All Facilities and All Types of Oils

Sec. 112.1 General applicability.

(a)(1) This part establishes procedures, methods, equipment, and other requirements to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act).

(2) As used in this part, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may require.

(b) Except as provided in paragraph (d) of this section, this part applies to any owner or operator of a non-transportation-related onshore or offshore facility engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful, as described in part 110 of this chapter, into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act) that has oil in:

(1) Any aboveground container;

(2) Any completely buried tank as defined in Sec. 112.2;

(3) Any container that is used for standby storage, for seasonal storage, or for temporary storage, or not otherwise ``permanently closed" as defined in Sec. 112.2;

(4) Any ``bunkered tank" or ``partially buried tank" as defined in Sec. 112.2, or any container in a vault, each of which is considered an aboveground storage container for purposes of this part.

(c) As provided in section 313 of the Clean Water Act (CWA), departments, agencies, and instrumentalities of the Federal government are subject to this part to the same extent as any person.

(d) Except as provided in paragraph (f) of this section, this part does not apply to:

(1) The owner or operator of any facility, equipment, or operation that is not subject to the jurisdiction of the Environmental Protection Agency (EPA) under section 311(j)(1)(C) of the CWA, as follows:

(i) Any onshore or offshore facility, that due to its location, could not reasonably be expected to have a discharge as described in paragraph (b) of this section. This determination must be based solely upon consideration of the geographical and location aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.) and must exclude consideration of manmade features such as dikes, equipment or other structures, which may serve to restrain, hinder, contain, or otherwise prevent a discharge as described in paragraph (b) of this section.

(ii) Any equipment, or operation of a vessel or transportation-related onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation, as defined in the Memorandum of Understanding between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971 (Appendix A of this part).

(iii) Any equipment, or operation of a vessel or onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation or the U.S. Department of the Interior, as defined in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of this part).

(2) Any facility which, although otherwise subject to the jurisdiction of EPA, meets both of the following requirements:

(i) The completely buried storage capacity of the facility is 42,000 gallons or less of oil. For purposes of this exemption, the completely buried storage capacity of a facility excludes the capacity of a completely buried tank, as defined in Sec. 112.2, and connected underground piping, underground ancillary equipment, and containment systems, that is currently subject to all of the technical requirements of part 280 of this chapter or all of the technical requirements of a State program approved under part 281 of this chapter. The completely buried storage capacity of a facility also excludes the capacity of a container that is "permanently closed," as defined in Sec. 112.2.

(ii) The aggregate aboveground storage capacity of the facility is 1,320 gallons or less of oil. For purposes of this exemption, only containers of oil with a capacity of 55 gallons or greater are counted. The aggregate aboveground storage capacity of a facility excludes the of a container that is "permanently closed," as defined in Sec. 112.2.

(3) Any offshore oil drilling, production, or workover facility that is subject to the notices and regulations of the Minerals Management Service, as specified in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of this part).

(4) Any completely buried storage tank, as defined in Sec. 112.2, and connected underground piping, underground ancillary equipment, and containment systems, at any facility, that is subject to all of the technical requirements of part 280 of this chapter or a State program approved under part 281 of this chapter, except that such a tank must be marked on the facility diagram as provided in Sec. 112.7(a)(3), if the facility is otherwise subject to this part.

(5) Any container with a storage capacity of less than 55 gallons of oil.

(6) Any facility or part thereof used exclusively for wastewater treatment and not used to satisfy any requirement of this part. The production, recovery, or recycling of oil is not wastewater treatment for purposes of this paragraph.

(e) This part establishes requirements for the preparation and implementation of Spill Prevention, Control, and Countermeasure (SPCC) Plans. SPCC Plans are designed to complement existing laws, regulations, rules, standards, policies, and procedures pertaining to safety standards, fire prevention, and pollution prevention rules. The purpose of an SPCC Plan is to form a comprehensive Federal/State spill prevention program that minimizes the potential for discharges. The SPCC Plan must address all relevant spill prevention, control, and countermeasures necessary at the specific facility. Compliance with this part does not in any way relieve the owner or operator of an onshore or an offshore facility from compliance with other Federal, State, or local laws.

(f) Notwithstanding paragraph (d) of this section, the Regional Administrator may require that the owner or operator of any facility subject to the jurisdiction of EPA under section 311(j) of the CWA prepare and implement an SPCC Plan, or any applicable part, to carry out the purposes of the CWA.

(1) Following a preliminary determination, the Regional Administrator must provide a written notice to the owner or operator stating the reasons why he must prepare an SPCC Plan, or applicable part. The Regional Administrator must send such notice to the owner or operator by certified mail or by personal delivery. If the owner or operator is a

corporation, the Regional Administrator must also mail a copy of such notice to the registered agent, if any and if known, of the corporation in the State where the facility is located.

(2) Within 30 days of receipt of such written notice, the owner or operator may provide information and data and may consult with the Agency about the need to prepare an SPCC Plan, or applicable part.

(3) Within 30 days following the time under paragraph (b)(2) of this section within which the owner or operator may provide information and data and consult with the Agency about the need to prepare an SPCC Plan, or applicable part, the Regional Administrator must make a final determination regarding whether the owner or operator is required to prepare and implement an SPCC Plan, or applicable part. The Regional Administrator must send the final determination to the owner or operator by certified mail or by personal delivery. If the owner or operator is a corporation, the Regional Administrator must also mail a copy of the final determination to the registered agent, if any and if known, of the corporation in the State where the facility is located.

(4) If the Regional Administrator makes a final determination that an SPCC Plan, or applicable part, is necessary, the owner or operator must prepare the Plan, or applicable part, within six months of that final determination and implement the Plan, or applicable part, as soon as possible, but not later than one year after the Regional Administrator has made a final determination.

(5) The owner or operator may appeal a final determination made by the Regional Administrator requiring preparation and implementation of an SPCC Plan, or applicable part, under this paragraph. The owner or operator must make the appeal to the Administrator of EPA within 30 days of receipt of the final determination under paragraph (b)(3) of this section from the Regional Administrator requiring preparation and/or implementation of an SPCC Plan, or applicable part. The owner or operator must send a complete copy of the appeal to the Regional Administrator at the time he makes the appeal to the Administrator. The appeal must contain a clear and concise statement of the issues and points of fact in the case. In the appeal, the owner or operator may also provide additional information. The additional information may be from any person. The Administrator may request additional information from the owner or operator. The Administrator must render a decision within 60 days of receiving the appeal or additional information submitted by the owner or operator and must serve the owner or operator with the decision made in the appeal in the manner described in paragraph (f)(1) of this section.

Sec. 112.2 Definitions.

For the purposes of this part:

Adverse weather means weather conditions that make it difficult for response equipment and personnel to clean up or remove spilled oil, and that must be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height as specified in Appendix E to this part (as appropriate), ice conditions, temperatures, weather-related visibility, and currents within the area in which the systems or equipment is intended to function.

Alteration means any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of the container.

Animal fat means a non-petroleum oil, fat, or grease of animal, fish, or marine mammal origin.

Breakout tank means a container used to relieve surges in an oil pipeline system or to receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.

Bulk storage container means any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container.

Bunkered tank means a container constructed or placed in the ground by cutting the earth and re-covering the container in a manner that breaks the surrounding natural grade, or that lies above grade, and is covered with earth, sand, gravel, asphalt, or other material. A bunkered tank is considered an aboveground storage container for purposes of this part.

Completely buried tank means any container completely below grade and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage containers for purposes of this part.

Complex means a facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the CWA.

Contiguous zone means the zone established by the United States under Article 24 of the Convention of the Territorial Sea and Contiguous Zone, that is contiguous to the territorial sea and that extends nine miles seaward from the outer limit of the territorial area.

Contract or other approved means means:

(1) A written contractual agreement with an oil spill removal organization that identifies and ensures the availability of the necessary personnel and equipment within appropriate response times; and/or

(2) A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times; and/or

(3) Active membership in a local or regional oil spill removal organization that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the specified geographic area; and/or

(4) Any other specific arrangement approved by the Regional Administrator upon request of the owner or operator.

Discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under section 402 of the CWA; discharges resulting from circumstances identified, reviewed, and made a part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit; or continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring within the scope of relevant operating or treatment systems. For purposes of this part, the term discharge shall not include any discharge of oil that is authorized by a permit issued under section 13 of the River and Harbor Act of 1899 (33 U.S.C. 407).

Facility means any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and waste treatment, or in which oil is used, as described in Appendix A to this part. The boundaries of a facility depend on several site-specific factors, including, but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and the types of activity at the site.

Fish and wildlife and sensitive environments means areas that may be identified by their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and State parks, critical habitats for endangered or threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historical and archaeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.

Injury means a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge, or exposure to a product of reactions resulting from a discharge.

Maximum extent practicable means within the limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst case discharges from onshore non-transportation-related facilities in adverse weather.

It includes the planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the requirements in Sec. 112.20 or in a specific plan approved by the Regional Administrator.

Navigable waters means the waters of the United States, including the territorial seas.

(1) The term includes:

(i) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;

(ii) All interstate waters, including interstate wetlands;

(iii) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds,

the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:

(A) That are or could be used by interstate or foreign travelers for recreational or other purposes; or

(B) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or,
(C) That are or could be used for industrial purposes by industries in interstate commerce;
(iv) All impoundments of waters otherwise defined as waters of the United States under this section;
(v) Tributaries of waters identified in paragraphs (1)(i) through (iv) of this definition;
(vi) The territorial sea; and
(vii) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (1) of this definition.

(2) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds which also meet the criteria of this definition) are not waters of the United States. Navigable waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

Non-petroleum oil means oil of any kind that is not petroleum-based, including but not limited to: Fats, oils, and greases of animal, fish, or marine mammal origin; and vegetable oils, including oils from seeds, nuts, fruits, and kernels.

Offshore facility means any facility of any kind (other than a vessel or public vessel) located in, on, or under any of the navigable waters of the United States, and any facility of any kind that is subject to the jurisdiction of the United States and is located in, on, or under any other waters.

Oil means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Oil Spill Removal Organization means an entity that provides oil spill response resources, and includes any for-profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources.

Onshore facility means any facility of any kind located in, on, or under any land within the United States, other than submerged lands.

Owner or operator means any person owning or operating an onshore facility or an offshore facility, and in the case of any abandoned offshore facility, the person who owned or operated or maintained the facility immediately prior to such abandonment.

Partially buried tank means a storage container that is partially inserted or constructed in the ground, but not entirely below grade, and not completely covered with earth, sand, gravel, asphalt, or other material. A partially buried tank is considered an aboveground storage container for purposes of this part.

Permanently closed means any container or facility for which:

(1) All liquid and sludge has been removed from each container and connecting line; and
(2) All connecting lines and piping have been disconnected from the container and blanked off, all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting the date of closure.

Person includes an individual, firm, corporation, association, or partnership.

Petroleum oil means petroleum in any form, including but not limited to crude oil, fuel oil, mineral oil, sludge, oil refuse, and refined products.

Production facility means all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flowlines or gathering lines), or equipment (including but not limited to workover equipment, separation equipment, or auxiliary non-transportation-related equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil, or associated storage or measurement, and located in a single geographical oil or gas field operated by a single operator.

Regional Administrator means the Regional Administrator of the Environmental Protection Agency, in and for the Region in which the facility is located.

Repair means any work necessary to maintain or restore a container to a condition suitable for safe operation, other than that necessary for ordinary, day-to-day maintenance to maintain the functional integrity of the container and that does not weaken the container.

Spill Prevention, Control, and Countermeasure Plan; SPCC Plan, or Plan means the document required by Sec. 112.3 that details the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to a discharge.

Storage capacity of a container means the shell capacity of the container.

Transportation-related and non-transportation-related, as applied to an onshore or offshore facility, are defined in the Memorandum of Understanding between the Secretary of Transportation and the Administrator of the Environmental Protection Agency, dated November 24, 1971, (Appendix A of this part).

United States means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and the Pacific Island Governments.

Vegetable oil means a non-petroleum oil or fat of vegetable origin, including but not limited to oils and fats derived from plant seeds, nuts, fruits, and kernels.

Vessel means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

Worst case discharge for an onshore non-transportation-related facility means the largest foreseeable discharge in adverse weather conditions as determined using the worksheets in Appendix D to this part.

Sec. 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.

The owner or operator of an onshore or offshore facility subject to this section must prepare a Spill Prevention, Control, and Countermeasure Plan (hereafter "SPCC Plan" or "Plan"), in writing, and in accordance with Sec. 112.7, and any other applicable section of this part.

(a) If your onshore or offshore facility was in operation on or before August 16, 2002, you must maintain your Plan, but must amend it, if necessary to ensure compliance with this part, on or before February 17, 2003, and must implement the amended Plan as soon as possible, but not later than August 18, 2003. If your onshore or offshore facility becomes operational after August 16, 2002, through August 18, 2003, and could reasonably be expected to have a discharge as described in

Sec. 112.1(b), you must prepare a Plan on or before August 18, 2003, and fully implement it as soon as possible, but not later than August 18, 2003.

(b) If you are the owner or operator of an onshore or offshore facility that becomes operational after August 18, 2003, and could reasonably be expected to have a discharge as described in Sec. 112.1(b), you must prepare and implement a Plan before you begin operations.

(c) If you are the owner or operator of an onshore or offshore mobile facility, such as an onshore drilling or workover rig, barge mounted offshore drilling or workover rig, or portable fueling facility, you must prepare, implement, and maintain a facility Plan as required by this section. This provision does not require that you prepare a new Plan each time you move the facility to a new site. The Plan may be a general plan. When you move the mobile or portable facility, you must locate and install it using the discharge prevention practices outlined in the Plan for the facility. You may not operate a mobile or portable facility subject to this part unless you have implemented the Plan. The Plan is applicable only while the facility is in a fixed (non-transportation) operating mode.

(d) A licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part.

(1) By means of this certification the Professional Engineer attests:

- (i) That he is familiar with the requirements of this part ;
- (ii) That he or his agent has visited and examined the facility;
- (iii) That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;
- (iv) That procedures for required inspections and testing have been established; and
- (v) That the Plan is adequate for the facility.

(2) Such certification shall in no way relieve the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part.

(e) If you are the owner or operator of a facility for which a Plan is required under this section, you must:

- (1) Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and
- (2) Have the Plan available to the Regional Administrator for on-site review during normal working hours.

(f) Extension of time. (1) The Regional Administrator may authorize an extension of time for the preparation and full implementation of a Plan, or any amendment thereto, beyond the time permitted for the preparation, implementation, or amendment of a Plan under this part, when he finds that the owner or operator of a facility subject to this section, cannot fully comply with the requirements as a result of either nonavailability of qualified personnel, or delays in construction or equipment delivery beyond the control and without the fault of such owner or operator or his agents or employees.

(2) If you are an owner or operator seeking an extension of time under paragraph (f)(1) of this section, you may submit a written extension request to the Regional Administrator. Your request must include:

- (i) A full explanation of the cause for any such delay and the specific aspects of the Plan affected by the delay;
- (ii) A full discussion of actions being taken or contemplated to minimize or mitigate such delay; and
- (iii) A proposed time schedule for the implementation of any corrective actions being taken or contemplated, including interim dates for completion of tests or studies, installation and operation of any necessary equipment, or other preventive measures. In addition you may present additional oral or written statements in support of your extension request.

(3) The submission of a written extension request under paragraph (f)(2) of this section does not relieve you of your obligation to comply with the requirements of this part. The Regional Administrator may request a copy of your Plan to evaluate the extension request. When the Regional Administrator authorizes an extension of time for particular equipment or other specific aspects of the Plan, such extension does not affect your obligation to comply with the requirements related to other equipment or other specific aspects of the Plan for which the Regional Administrator has not expressly authorized an extension.

Sec. 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.

If you are the owner or operator of a facility subject to this part, you must:

(a) Notwithstanding compliance with Sec. 112.3, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in Sec. 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in Sec. 112.1(b), occurring within any twelve month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject to this section:

- (1) Name of the facility;
- (2) Your name;
- (3) Location of the facility;
- (4) Maximum storage or handling capacity of the facility and normal daily throughput;
- (5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;
- (6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
- (7) The cause of such discharge as described in Sec. 112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;
- (8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and
- (9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

(b) Take no action under this section until it applies to your facility. This section does not apply until the expiration of the time permitted for the initial preparation and implementation of the Plan under Sec. 112.3, but not including any amendments to the Plan.

(c) Send to the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located a complete copy of all information you provided to the Regional Administrator under paragraph (a) of this section. Upon receipt of the information such State agency or agencies may conduct a review and make recommendations to the Regional Administrator as to further procedures, methods, equipment, and other requirements necessary to prevent and to contain discharges from your facility.

(d) Amend your Plan, if after review by the Regional Administrator of the information you submit under paragraph (a) of this section, or submission of information to EPA by the State agency under paragraph

(c) of this section, or after on-site review of your Plan, the Regional Administrator requires that you do so. The Regional Administrator may require you to amend your Plan if he finds that it does not meet the requirements of this part or that amendment is necessary to prevent and contain discharges from your facility.

(e) Act in accordance with this paragraph when the Regional Administrator proposes by certified mail or by personal delivery that you amend your SPCC Plan. If the owner or operator is a corporation, he must also notify by mail the registered agent of such corporation, if any and if known, in the State in which the facility is located. The Regional Administrator must specify the terms of such proposed amendment. Within 30 days from receipt of such notice, you may submit written information, views, and arguments on the proposed amendment. After considering all relevant material presented, the Regional Administrator must either notify you of any amendment required or rescind the notice. You must amend your Plan as required within 30 days after such notice, unless the Regional Administrator, for good cause, specifies another effective date. You must implement the amended Plan as soon as possible, but not later than six months after you amend your Plan, unless the Regional Administrator specifies another date.

(f) If you appeal a decision made by the Regional Administrator requiring an amendment to an SPCC Plan, send the appeal to the EPA Administrator in writing within 30 days of receipt of the notice from the Regional Administrator requiring the amendment under paragraph (e) of this section. You must send a complete copy of the appeal to the Regional Administrator at the time you make the appeal. The appeal must contain a clear and concise statement of the issues and points of fact in the case. It may also contain additional information from you, or from any other person. The EPA Administrator may request additional information from you, or from any other person. The EPA Administrator must render a decision within 60 days of receiving the appeal and must notify you of his decision.

Sec. 112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.

If you are the owner or operator of a facility subject to this part, you must:

(a) Amend the SPCC Plan for your facility in accordance with the general requirements in Sec. 112.7, and with any specific section of this part applicable to your facility, when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge as described in Sec. 112.1(b). Examples of changes that may require amendment of the Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a facility. An amendment made under this section must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment.

(b) Notwithstanding compliance with paragraph (a) of this section, complete a review and evaluation of the SPCC Plan at least once every five years from the date your facility becomes subject to this part; or, if your facility was in operation on or before August 16, 2002, five years from the date your last review was required under this part. As a result of this review and evaluation, you must amend your SPCC Plan within six months of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge as described in Sec. 112.1(b) from the facility. You must implement any amendment as soon as possible, but not later than six months following preparation of any amendment. You must document your completion of the review and evaluation, and must sign a statement as to whether you will amend the Plan, either at the beginning or end of the Plan or in a log or an appendix to the Plan. The following words will suffice, "I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result."

(c) Have a Professional Engineer certify any technical amendment to your Plan in accordance with Sec. 112.3(d).

Sec. 112.6 [Reserved]

Sec. 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional

Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. As detailed elsewhere in this section, you must also:

(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part.

(2) Comply with all applicable requirements listed in this part. Your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and Secs. 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and Secs. 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in Sec. 112.4(d) and (e).

(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under Sec. 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes. You must also address in your Plan:

(i) The type of oil in each container and its storage capacity;

(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);

(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;

(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);

(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and

(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in Sec. 112.1(b).

(4) Unless you have submitted a response plan under Sec. 112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in Sec. 112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in Sec. 112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

(5) Unless you have submitted a response plan under Sec. 112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.

(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in Sec. 112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing;

- (iii) Culvertifgng, gutters, or other drainage systems;
- (iv) Weirs, booms, or other barriers;
- (v) Spill diversion ponds;
- (vi) Retention ponds; or
- (vii) Sorbent materials.
- (2) For offshore facilities:
 - (i) Curbing or drip pans; or
 - (ii) Sumps and collection systems.
- (d) If you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and Secs. 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c) to prevent a discharge as described in Sec. 112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under Sec. 112.20, provide in your Plan the following:
 - (1) An oil spill contingency plan following the provisions of part 109 of this chapter.
 - (2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.
- (e) Inspections, tests, and records. Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.
- (f) Personnel, training, and discharge prevention procedures. (1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.
 - (2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.
 - (3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in Sec. 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.
- (g) Security (excluding oil production facilities). (1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.
 - (2) Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.
 - (3) Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is in a non-operating or non-standby status.
 - (4) Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.
- (5) Provide facility lighting commensurate with the type and location of the facility that will assist in the:
 - (i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and
 - (ii) Prevention of discharges occurring through acts of vandalism.
- (h) Facility tank car and tank truck loading/unloading rack (excluding offshore facilities). (1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.
 - (2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

3. Part 112 is amended adding subpart B consisting of Secs. 112.8 through 112.11 to read as follows:

Subpart B--Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

Sec.

112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

Subpart B--Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

Sec. 112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under Sec. 112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) Facility drainage. (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

(2) Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.

(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in Sec. 112.1(b) in case there is an equipment failure or human error at the facility.

(c) Bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

- (i) Normally keep the bypass valve sealed closed.
- (ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in Sec. 112.1(b).
- (iii) Open the bypass valve and reseal it following drainage under responsible supervision; and
- (iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with Secs. 122.41(j)(2) and 122.41(m)(3) of this chapter.

(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

- (i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.
- (ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.
- (iii) Direct audible or code signal communication between the container gauger and the pumping station.
- (iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.
- (v) You must regularly test liquid level sensing devices to ensure proper operation.

(9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in Sec. 112.1(b).

(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

(11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in Sec. 112.1(b). You must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

(d) Facility transfer operations, pumping, and facility process. (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.

(2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

- (3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.
- (4) Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.
- (5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

Sec. 112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

If you are the owner or operator of an onshore production facility, you must:

- (a) Meet the general requirements for the Plan listed under Sec. 112.7, and the specific discharge prevention and containment procedures listed under this section.
- (b) Oil production facility drainage. (1) At tank batteries and separation and treating areas where there is a reasonable possibility of a discharge as described in Sec. 112.1(b), close and seal at all times drains of dikes or drains of equivalent measures required under Sec. 112.7(c)(1), except when draining uncontaminated rainwater. Prior to drainage, you must inspect the diked area and take action as provided in Sec. 112.8(c)(3)(ii), (iii), and (iv). You must remove accumulated oil on the rainwater and return it to storage or dispose of it in accordance with legally approved methods.
- (2) Inspect at regularly scheduled intervals field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers, for an accumulation of oil that may have resulted from any small discharge. You must promptly remove any accumulations of oil.
- (c) Oil production facility bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage.
- (2) Provide all tank battery, separation, and treating facility installations with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must safely confine drainage from undiked areas in a catchment basin or holding pond.
- (3) Periodically and upon a regular schedule visually inspect each container of oil for deterioration and maintenance needs, including the foundation and support of each container that is on or above the surface of the ground.
- (4) Engineer or update new and old tank battery installations in accordance with good engineering practice to prevent discharges. You must provide at least one of the following:
 - (i) Container capacity adequate to assure that a container will not overfill if a pumper/gauger is delayed in making regularly scheduled rounds.
 - (ii) Overflow equalizing lines between containers so that a full container can overflow to an adjacent container.
 - (iii) Vacuum protection adequate to prevent container collapse during a pipeline run or other transfer of oil from the container.
 - (iv) High level sensors to generate and transmit an alarm signal to the computer where the facility is subject to a computer production control system.
- (d) Facility transfer operations, oil production facility. (1) Periodically and upon a regular schedule inspect all aboveground valves and piping associated with transfer operations for the general condition of flange joints, valve glands and bodies, drip pans, pipe supports, pumping well polish rod stuffing boxes, bleeder and gauge valves, and other such items.
- (2) Inspect saltwater (oil field brine) disposal facilities often, particularly following a sudden change in atmospheric temperature, to detect possible system upsets capable of causing a discharge.
- (3) Have a program of flowline maintenance to prevent discharges from each flowline.

Sec. 112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

If you are the owner or operator of an onshore oil drilling and workover facility, you must:

- (a) Meet the general requirements listed under Sec. 112.7, and also meet the specific discharge prevention and containment procedures listed under this section.
- (b) Position or locate mobile drilling or workover equipment so as to prevent a discharge as described in Sec. 112.1(b).

(c) Provide catchment basins or diversion structures to intercept and contain discharges of fuel, crude oil, or oily drilling fluids.

(d) Install a blowout prevention (BOP) assembly and well control system before drilling below any casing string or during workover operations. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

Sec. 112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

If you are the owner or operator of an offshore oil drilling, production, or workover facility, you must:

(a) Meet the general requirements listed under Sec. 112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Use oil drainage collection equipment to prevent and control small oil discharges around pumps, glands, valves, flanges, expansion joints, hoses, drain lines, separators, treaters, tanks, and associated equipment. You must control and direct facility drains toward a central collection sump to prevent the facility from having a discharge as described in Sec. 112.1(b). Where drains and sumps are not practicable, you must remove oil contained in collection equipment as often as necessary to prevent overflow.

(c) For facilities employing a sump system, provide adequately sized sump and drains and make available a spare pump to remove liquid from the sump and assure that oil does not escape. You must employ a regularly scheduled preventive maintenance inspection and testing program to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some installations.

(d) At facilities with areas where separators and treaters are equipped with dump valves which predominantly fail in the closed position and where pollution risk is high, specially equip the facility to prevent the discharge of oil. You must prevent the discharge of oil by:

(1) Extending the flare line to a diked area if the separator is near shore;

(2) Equipping the separator with a high liquid level sensor that will automatically shut in wells producing to the separator; or

(3) Installing parallel redundant dump valves.

(e) Equip atmospheric storage or surge containers with high liquid level sensing devices that activate an alarm or control the flow, or otherwise prevent discharges.

(f) Equip pressure containers with high and low pressure sensing devices that activate an alarm or control the flow.

(g) Equip containers with suitable corrosion protection.

(h) Prepare and maintain at the facility a written procedure within the Plan for inspecting and testing pollution prevention equipment and systems.

(i) Conduct testing and inspection of the pollution prevention equipment and systems at the facility on a scheduled periodic basis, commensurate with the complexity, conditions, and circumstances of the facility and any other appropriate regulations. You must use simulated discharges for testing and inspecting human and equipment pollution control and countermeasure systems.

(j) Describe in detailed records surface and subsurface well shut-in valves and devices in use at the facility for each well sufficiently to determine their method of activation or control, such as pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote control mechanisms.

(k) Install a BOP assembly and well control system during workover operations and before drilling below any casing string. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while the BOP assembly and well control system are on the well.

(l) Equip all manifolds (headers) with check valves on individual flowlines.

(m) Equip the flowline with a high pressure sensing device and shut-in valve at the wellhead if the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves. Alternatively you may provide a pressure relief system for flowlines.

(n) Protect all piping appurtenant to the facility from corrosion, such as with protective coatings or cathodic protection.

(o) Adequately protect sub-marine piping appurtenant to the facility against environmental stresses and other activities such as fishing operations.

(p) Maintain sub-marine piping appurtenant to the facility in good operating condition at all times. You must periodically and according to a schedule inspect or test such piping for failures. You must document and keep a record of such inspections or tests at the facility.

4. Part 112 is amended by adding subpart C consisting of Secs. 112.12 through 112.15 to read as follows:

Subpart C--Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, Including Oils from Seeds, Nuts, Fruits and Kernels

Sec. 112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

112.13 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

112.14 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

112.15 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

Subpart C--Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, including Oils from Seeds, Nuts, Fruits, and Kernels.

Sec. 112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities)

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under Sec. 112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) Facility drainage. (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

(2) Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, subject to the requirements of paragraphs (c)(3)(ii), (iii), and (iv) of this section.

(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in Sec. 112.1(b) in case there is an equipment failure or human error at the facility.

(c) Bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in Sec.

112.1(b).

(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and

(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with Secs. 122.41(j)(2) and 122.41(m)(3) of this chapter.

(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.

(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.

(iii) Direct audible or code signal communication between the container gauger and the pumping station.

(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.

(v) You must regularly test liquid level sensing devices to ensure proper operation.

(9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in Sec. 112.1(b).

(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

(11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in Sec. 112.1(b). You must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

(d) Facility transfer operations, pumping, and facility process.

(1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.

(2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

(3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

(4) Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

(5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

Sec. 112.13 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

If you are the owner or operator of an onshore production facility, you must:

(a) Meet the general requirements for the Plan listed under Sec. 112.7, and the specific discharge prevention and containment procedures listed under this section.

(b) Oil production facility drainage. (1) At tank batteries and separation and treating areas where there is a reasonable possibility of a discharge as described in Sec. 112.1(b), close and seal at all times drains of dikes or drains of equivalent measures required under Sec. 112.7(c)(1), except when draining uncontaminated rainwater. Prior to drainage, you must inspect the diked area and take action as provided in Sec. 112.12(c)(3)(ii), (iii), and (iv). You must remove accumulated oil on the rainwater and return it to storage or dispose of it in accordance with legally approved methods.

(2) Inspect at regularly scheduled intervals field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers, for an accumulation of oil that may have resulted from any small discharge. You must promptly remove any accumulations of oil.

(c) Oil production facility bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage.

(2) Provide all tank battery, separation, and treating facility installations with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must safely confine drainage from undiked areas in a catchment basin or holding pond.

(3) Periodically and upon a regular schedule visually inspect each container of oil for deterioration and maintenance needs, including the foundation and support of each container that is on or above the surface of the ground.

(4) Engineer or update new and old tank battery installations in accordance with good engineering practice to prevent discharges. You must provide at least one of the following:

(i) Container capacity adequate to assure that a container will not overfill if a pumper/gauger is delayed in making regularly scheduled grounds.

(ii) Overflow equalizing lines between containers so that a full container can overflow to an adjacent container.

(iii) Vacuum protection adequate to prevent container collapse during a pipeline run or other transfer of oil from the container.

(iv) High level sensors to generate and transmit an alarm signal to the computer where the facility is subject to a computer production control system.

(d) Facility transfer operations, oil production facility. (1) Periodically and upon a regular schedule inspect all aboveground valves and piping associated with transfer operations for the general condition of flange joints, valve glands and bodies, drip pans, pipe supports, pumping well polish rod stuffing boxes, bleeder and gauge valves, and other such items.

(2) Inspect saltwater (oil field brine) disposal facilities often, particularly following a sudden change in atmospheric temperature, to detect possible system upsets capable of causing a discharge.

(3) Have a program of flowline maintenance to prevent discharges from each flowline.

Sec. 112.14 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

If you are the owner or operator of an onshore oil drilling and workover facility, you must:

(a) Meet the general requirements listed under Sec. 112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Position or locate mobile drilling or workover equipment so as to prevent a discharge as described in Sec. 112.1(b).

(c) Provide catchment basins or diversion structures to intercept and contain discharges of fuel, crude oil, or oily drilling fluids.

(d) Install a blowout prevention (BOP) assembly and well control system before drilling below any casing string or during workover operations. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

Sec. 112.15 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

If you are the owner or operator of an offshore oil drilling, production, or workover facility, you must:

(a) Meet the general requirements listed under Sec. 112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Use oil drainage collection equipment to prevent and control small oil discharges around pumps, glands, valves, flanges, expansion joints, hoses, drain lines, separators, treaters, tanks, and associated equipment. You must control and direct facility drains toward a central collection sump to prevent the facility from having a discharge as described in Sec. 112.1(b). Where drains and sumps are not practicable, you must remove oil contained in collection equipment as often as necessary to prevent overflow.

(c) For facilities employing a sump system, provide adequately sized sump and drains and make available a spare pump to remove liquid from the sump and assure that oil does not escape. You must employ a regularly scheduled preventive maintenance inspection and testing program to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some installations.

(d) At facilities with areas where separators and treaters are equipped with dump valves which predominantly fail in the closed position and where pollution risk is high, specially equip the facility to prevent the discharge of oil.

You must prevent the discharge of oil by:

(1) Extending the flare line to a diked area if the separator is near shore;

(2) Equipping the separator with a high liquid level sensor that will automatically shut in wells producing to the separator; or

(3) Installing parallel redundant dump valves.

(e) Equip atmospheric storage or surge containers with high liquid level sensing devices that activate an alarm or control the flow, or otherwise prevent discharges.

(f) Equip pressure containers with high and low pressure sensing devices that activate an alarm or control the flow.

(g) Equip containers with suitable corrosion protection.

(h) Prepare and maintain at the facility a written procedure within the Plan for inspecting and testing pollution prevention equipment and systems.

(i) Conduct testing and inspection of the pollution prevention equipment and systems at the facility on a scheduled periodic basis, commensurate with the complexity, conditions, and circumstances of the facility and any other appropriate regulations. You must use simulated discharges for testing and inspecting human and equipment pollution control and countermeasure systems.

(j) Describe in detailed records surface and subsurface well shut-in valves and devices in use at the facility for each well sufficiently to determine their method of activation or control, such as pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote control mechanisms.

(k) Install a BOP assembly and well control system during workover operations and before drilling below any casing string. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

(l) Equip all manifolds (headers) with check valves on individual flowlines.

(m) Equip the flowline with a high pressure sensing device and shut-in valve at the wellhead if the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves. Alternatively you may provide a pressure relief system for flowlines.

(n) Protect all piping appurtenant to the facility from corrosion, such as with protective coatings or cathodic protection.

(o) Adequately protect sub-marine piping appurtenant to the facility against environmental stresses and other activities such as fishing operations.

(p) Maintain sub-marine piping appurtenant to the facility in good operating condition at all times. You must periodically and according to a schedule inspect or test such piping for failures. You must document and keep a record of such inspections or tests at the facility.

5. Part 112 is amended by designating Secs. 112.20 and 112.21 as subpart D, and adding a subpart heading as follows:

Subpart D--Response Requirements

Sec.

112.20 Facility response plans.

112.21 Facility response training and drills/exercises.

Subpart D--Response Requirements

6. Section 112.20 is amended by revising the first sentence of paragraph (h) to read as follows:

Sec. 112.20 Facility response plans.

* * * * *

(h) A response plan shall follow the format of the model facility-specific response plan included in Appendix F to this part, unless you have prepared an equivalent response plan acceptable to the Regional Administrator to meet State or other Federal requirements. * * *

* * * * *

Appendix C--[Amended]

7. Appendix C of part 112 is amended by:

- a. Revising the first sentence of section 2.1; and
- b. Revising the title and first sentence of section 2.4.

Appendix C to Part 112--Substantial Harm Criteria

* * * * *

2.1 Non-Transportation-Related Facilities With a Total Oil Storage Capacity Greater Than or Equal to 42,000 Gallons Where Operations Include Over-Water Transfers of Oil

A non-transportation-related facility with a total oil storage capacity greater than or equal to 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA. *

* *

* * * * *

2.4 Proximity to Public Drinking Water Intakes at Facilities with a Total Oil Storage Capacity Greater than or Equal to 1 Million Gallons

A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility would shut down a public drinking water intake, which is analogous to a public water system as described at 40 CFR 143.2(c). * * *

* * * * *

Appendix D--[Amended]

8. Appendix D of part 112 is amended by revising footnote 2 to section A.2 of Part A to read as follows:

Appendix D to Part 112--Determination of a Worst Case Discharge Planning Volume

* * * * *

Part A * * *

* * * * *

A.2 Secondary Containment--Multiple-Tank Facilities

* * * *

Secondary containment is described in 40 CFR part 112, subparts A through C. Acceptable methods and structures for containment are also given in 40 CFR 112.7(c)(1).

* * * * *

Appendix F--[Amended]

9. Appendix F of part 112 is amended by: a. Revising section 1.2.7; b. Revising the second and last sentences of section 1.4.3; c. Revising paragraph (7) and the undesignated paragraph and NOTE following paragraph (7) in section 1.7.3; d. Revising section 1.8.1; e. Revising the first two sentences of section 1.8.1.1. introductory text; f. Revising the next to the last sentence of section 1.8.1.3; g. Revising the next to last sentence of section 1.10.; h. Revising paragraph (6) of section 2.1; i. Remove the acronym ``SIC'' in section 3.0, and add in alphabetical order the acronym ``NAICS''; and. j. Remove the reference to ``Standard Industrial Classification (SIC) Code'' in Attachment F-1, General Information, and add in in alphabetical order a reference to ``North American Industrial Classification System (NAICS) Code.''

The revisions read as follows:

Appendix F to Part 112--Facility-Specific Response Plan

* * * * *

1.2.7 Current Operation

Briefly describe the facility's operations and include the North American Industrial Classification System (NAICS) code.

* * * * *

1.4.3 Analysis of the Potential for an Oil Discharge

* * * This analysis shall incorporate factors such as oil discharge history, horizontal range of a potential discharge, and vulnerability to natural disaster, and shall, as appropriate, incorporate other factors such as tank age.

* * * The owner or operator may need to research the age of the tanks the oil discharge history at the facility.

* * * * *

1.7.3 Containment and Drainage Planning

* * * * *

(7) Other cleanup materials. In addition, a facility owner or operator must meet the inspection and monitoring requirements for drainage contained in 40 CFR part 112, subparts A through C. A copy of the containment and drainage plans that are required in 40 CFR part 112, subparts A through C may be inserted in this section, including any diagrams in those plans.

Note: The general permit for stormwater drainage may contain additional requirements.

* * * * *

1.8.1 Facility Self-Inspection

Under 40 CFR 112.7(e), you must include the written procedures and records of inspections for each facility in the SPCC Plan. You must include the inspection records for each container, secondary containment, and item of response equipment at the facility. You must cross-reference the records of inspections of each container and secondary containment required by 40 CFR 112.7(e) in the facility response plan. The inspection record of response equipment is a new requirement in this plan. Facility self-inspection requires two-steps: (1) a checklist of things to inspect; and (2) a method of recording the actual inspection and its findings. You must note the date of each

inspection. You must keep facility response plan records for five years. You must keep SPCC records for three years.

* * * * *

1.8.1.1. Tank Inspection

The tank inspection checklist presented below has been included as guidance during inspections and monitoring. Similar requirements exist in 40 CFR part 112, subparts A through C. * * *

* * * * *

1.8.1.3 Secondary Containment Inspection

* * * * *

* * * Similar requirements exist in 40 CFR part 112, subparts A through C. * * *

* * * * *

1.10 Security

According to 40 CFR 112.7(g) facilities are required to maintain a certain level of security, as appropriate. * * *

* * * * *

2.1 General Information

* * * * *

(6) North American Industrial Classification System (NAICS) Code: Enter the facility's NAICS code as determined by the Office of Management and Budget (this information may be obtained from public library resources.)

* * * * *

3.0 Acronyms

* * * * *

NAICS: North American Industrial Classification System

* * * * *

Attachments to Appendix F

Attachment F-1--Response Plan Cover Sheet

* * * * *

General Information

* * * * *

North American Industrial Classification System (NAICS) Code:

* * * * *

[FR Doc. 02-16852 Filed 7-16-02; 8:45 am]

BILLING CODE 6560-50-P

APPENDIX E

**SPILL REPORTING FORM
(1 Page)**

APPENDIX E

SPILL REPORTING FORM

1. GENERAL		
Name of Facility: National Weather Service Amarillo Warning and Forecast Office	Address: 1610 South Coulter Street Amarillo, Texas 79108	
Completed By:	Organization: National Weather Service	
Position:	Phone:	
2. SPILL INFORMATION		
Date:	Time:	
Location at Facility:	Quantity:	
Substance Spilled:	Other:	
3. OUTSIDE NOTIFICATIONS		
Agencies	Recorder at Outside Agency	Date and Time
Call 9-1-1 (or the local emergency agency), if there is an immediate emergency. If "9" is required for an outside line, then call 9-9-1-1		
NWS/NOAA: Mike Jacob: (301) 713-1838, Ext. 165 Olga Kebis: (301) 713-1838, Ext. 173 Terry Brisbin: (817) 978-7777, Ext. 139 Mark George: (303) 497-3064		
EPA NATIONAL RESPONSE CENTER or U.S. COAST GUARD: (800) 424-8802		
Texas Natural Resource Commission: (800) 832-8224		
4. INFORMATION ON SOURCE AND CAUSE		
5. DESCRIPTION OF ENVIRONMENTAL DAMAGE		
6. CLEANUP ACTION(S) TAKEN		
7. CORRECTIVE ACTION(S) TO PREVENT FUTURE SPILLS		

Note: All information must be filled in. If something is unknown, write "unknown."
Copies must be submitted to the NWS/NOAA personnel listed above.

APPENDIX F

**CROSS REFERENCE OF THE REQUIREMENTS OF
TITLE 40 OF THE CODE OF FEDERAL REGULATIONS,
PARTS 112.7 AND 112.8, WITH THIS PLAN
(1 Page)**

APPENDIX F

CROSS REFERENCE OF THE REQUIREMENTS OF 40 CFR 112.7 and 112.8 WITH THIS PLAN

CFR Citation	Item	Plan Location
112.7(b)	Potential Spill Prediction, Volumes, and Rates	Part I.B.5 and Table 2
112.7(c)	Containment and Diversionary Structures	Part I.B.2 and Part II.B.2
112.7(d)	Secondary Containment Impracticability	Not Applicable
112.7(e)	Inspections and Record Keeping	Part II.A.3
112.7(f)	Training	See Subparts
112.7(f)(1)	Personnel Instructions	Part II.A.5 & Appendix D
112.7(f)(2)	Designated Person Responsible for Spill Prevention	Page i
112.7(f)(3)	Spill Prevention Briefings	Part IV.B.2
112.7(g)	Security	See Subparts
112.7(g)(1)	Fencing	Part II.A.4
112.7(g)(2)	Flow Valves Locked	Not Applicable
112.7(g)(3)	Starter Controls Locked	Not Applicable
112.7(g)(4)	Pipeline Loading and Unloading Connections Securely Capped	Not Applicable
112.7(g)(5)	Lighting Adequate to Detect Spills	Part II.A.4
112.7(h)	Facility Truck Unloading Operations	Part II.A.2
112.7(i)	Container Evaluation after Repair	Page ii, Part II.B.3
112.8(b)	Drainage Control	Part I.B.3
112.8(c)	Bulk Storage Tanks and Secondary Containment	See Subparts
112.8(c)(1)	Tank Compatibility with Its Contents	Part II.A.1
112.8(c)(2)	Diked Area Construction and Containment for Storage Tanks	Not Applicable
112.8(c)(3)	Diked Area Inspection and Drainage of Rainwater	Not Applicable
112.8(c)(4)	Corrosion Protection of Buried Metallic Storage Tanks	Not Applicable
112.8(c)(5)	Corrosion Protection of Partially Buried Metallic Tanks	Not Applicable
112.8(c)(6)	Aboveground Tank Periodic Integrity Testing	Part IV.B.1
112.8(c)(7)	Control of Leakage through Internal Heating Coils	Not Applicable
112.8(c)(8)	Tank Installation Fail-safe Engineered	Part II.A.1, B.1
112.8(c)(9)	Observation of Disposal Facilities for Effluent Discharge	Not Applicable
112.8(c)(10)	Visible Oil Leak Corrections from Tank Seams and Gaskets	Part II.A.3 & Appendix C
112.8(c)(11)	Appropriate Position of Mobile or Portable Tanks	Not Applicable
112.8(d)	Facility Transfer Operations	See Subparts
112.8(d)(1)	Buried Piping Installation Protection and Examination	Part II.A.1 & Appendix C
112.8(d)(2)	Not-in-service and Standby Terminal Connections	Not Applicable
112.8(d)(3)	Pipe Support Designs	Not Applicable
112.8(d)(4)	Aboveground Valve and Pipeline Examination	Not Applicable
112.8(d)(5)	Aboveground Piping Protection from Vehicular Traffic	Not Applicable

Note: CFR Code of Federal Regulations